

# W5YI

National Volunteer Examiner Coordinator

## REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

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Vol. 13, Issue #6

\$1.50

PUBLISHED TWICE A MONTH

March 15, 1991

## FCC PROPOSES AMATEUR RADIO "USER FEES"

Confronted with inadequate funding, deteriorating buildings and equipment, and an ever-growing workload, the Federal Communications Commission has proposed controversial new "user fees" for all radio services and many non-radio communications services that require Commission attention. Whether commercial or noncommercial, all "fee-able" services would have to pay or face cancellation of their FCC authorization to operate. Some 3 million users of the spectrum would be subject to the fee.

The newly proposed fees are separate from application and license processing fees which are levied on most radio services. The amateur service is currently exempt from these charges. The new user fees would cover FCC "operational" costs tied to rulemaking, enforcement and other regulatory activities.

The plan is already drawing opposition from spectrum users including the National Association of Broadcasters and public-safety radio licensees. Last year, the NAB waged a very aggressive battle against a proposed 4% spectrum tax on a broadcast station's total revenue. Broadcasters say they already spend millions to serve the public interest.

Of the scores of fees to be charged to "FCC users" of all kinds, from satellite operators to TV

stations to telephone companies, the fee proposed for Amateur Radio is the smallest of all. According to Alfred Sikes, FCC chairman, hams would pay \$3.00 for each year of their ten-year license term. The fee would be collected from each amateur in one lump sum of \$30.00.

In contrast, most Private Radio Services would pay \$10.00 for each year of the typical 5-year license term, *in addition* to FCC application filing fees of about \$35.00 and frequency coordination fees, charged by FCC-certified coordinators, which can run into hundreds of dollars. The FCC already raises over \$40 million a year from existing application processing fees.

Contrary to some early reports, (including one from the chairman himself to our own Washington reporter), the new fees are not merely a higher rate for the existing application fees. The new fees are over and above the application fees. The American Radio Relay League led a successful charge in the Congress to have amateurs exempted from these license processing fees, however.

The chairman presented his fee plan to the Congress in a series of hearings earlier this month before a House Appropriations Subcommittee panel. He provided no information about how the fee would be submitted ...or if Volunteer Examiner



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Coordinators would be responsible for collection of the fees. Currently, VEs collect examination administration fees at testing time in the amount of \$5.25. This is to reimburse the VEC System for costs associated with preparing and administering the amateur service examination program.

The application fees for most other private radio services are collected by a Pittsburgh bank. The bank retrieves the fee payments from applicants' mail sent to FCC post office boxes, and deposits the money in Treasury accounts as quickly as possible. Then the bank forwards the license applications to the FCC for processing.

Half of the FCC's budget for fiscal 1992 would come from spectrum use fees under a proposal put forth by President Bush in his 1992 federal spending plan. According to the administration, the new user fees would help in fighting the federal deficit, a slumping economy, the added cost of the Persian Gulf War and the savings and loan bailout.

Not only would licensees be subject to these fees, but other telecommunications services as well. Cable systems, for example, aren't licensed by the FCC, but are regulated by it. The 1992 fiscal year begins October 1, 1991.

The FCC does not yet have authority to charge the user fees. Congress must deal with how to finance the FCC's \$133 million funding request in addition to the user fee issue. The FCC said that it could raise over \$65 million from the fees. (\$25.3 million of it would come from land mobile and cellular radio, satellite operators, long distance and local phone companies.) It proposed to keep up to \$65 million and forward the rest to the U.S. Treasury.

Being able to self-generate half of its funding would grant the FCC some degree of independence from Congressional control, which might cause some legislators to hesitate. Past FCC chairmen got along poorly with Congress, and some observers believe Congress used its "power of the purse" to penalize an FCC and chairmen it did not agree with. The FCC is now trying to compensate for this past withholding of funding.

The \$133 million FCC request is 15% (\$17.6 million) higher than last year - the largest hike ever. Of particular budgetary concern is the aging equipment used by the FCC's Field Operations Bureau. The FOB is responsible for monitoring the entire spectrum for violations and emergency situations that require special direction-finding (DF) capability.

The FCC maintains a Watch Officer 24 hours a day in the Communications Center on the seventh floor of its main building in northwest Washington. The Watch Officer coordinates direction-finding operations of the network of 35 field offices and monitoring stations, including 13 Wullenweber DF antennas.

"[This] radio equipment is extremely old and unreliable," the FCC told Congress, "frequently failing and disrupting HF network coordination. Lack of modern equipment prevents participation in the inter-agency emergency coordination system. The measurement equipment is obsolete, unreliable, or inoperative which greatly hinders the off-the-air analysis of technical operating parameters." Chairman Sikes asked for \$151,000 to modernize HF Network Operations ...and \$887,000 for VHF/-UHF Operations such as mobile and fixed, remote-control DF systems.

The FCC said that its "...effectiveness continues to diminish" because of past inadequate funding. FCC staffing has been cut 20% since 1980. Much of the FCC's budget request consists of descriptions of what will happen if doesn't get the money it is asking for.

"If the FCC is not provided with adequate resources to do these jobs expeditiously," it said, "the benefits of new spectrum-based technologies will be deferred -- adversely affecting the productivity of the U.S. workforce and putting the U.S. economy at a disadvantage to its foreign competitors."

The FCC also wants to hire another 38 new employees in its common carrier bureau and plans to use some of the additional resources to fund investigative work needed on high definition television and other high technology communications

The Radio Amateur's LICENSING HANDBOOK is for everyone who wants to know about amateur radio license tests, amateurs

NEW

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**March 15, 1991**

Blackwell has now received a letter from the FCC (dated March 6, 1991) advising him that his "...petition was received by the Commission on February 5, 1991, [and] assigned file no RM-7649, the *Public Notice* on March 6, 1991. In accordance with the Commission rules, interested parties may file comments to support or oppose your petition within 30 days of the date of public notice. Responses to comments may be filed not later than 15 days after the close of the comment

(one manual covers both 3A and 3B); Advanced (4A) or Extra Class (4B). Post 1.95. In pl 11.50. Ppi. 3. Lanc. 1 W. Ref. PO Box 565101; Dallas, TX 75356-5101 Tel. (toll free) 1-800-669-W5YI



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Jarrett used to be chairman of the ARRL's VHF Advisory Committee. "The new paragraph 'g' does not eliminate a trustee's responsibility for insuring the proper operation of his repeater. It is intended to protect him from blame for those instantaneous operations over which he has no effective control."

Comments go to: **FCC, Office of the Secretary, Washington, DC 20554**. Be sure to indicate that they are in response to: **RM-7649, Tom Blackwell, N5GAR**, would also like a copy of your submission. (**P.O. Box #25403, Dallas, TX 75225.**)

We finally got a copy of the FCC's **Notice of Inquiry** (PR Docket 91-36) seeking additional information on whether the Commission should take pre-emptive action to nullify certain state statutes and local ordinances affecting transceivers used by Amateur Radio Service licensees. "Some of these laws are so broad as to prohibit mere ownership of such transceivers if they are capable of reception of communications on certain frequencies other than amateur service frequencies."

The Notice is in response to a *Request for Declaratory Ruling Concerning the Possession of Radio Receivers Capable of Reception of Police or Other Public Safety Communications* filed by the American Radio Relay League on Nov. 13, 1989. A *Public Notice* was issued by the FCC a year ago inviting comments on ARRL's request, but "...no comments were received addressing certain technical issues that are before us in this matter."

The ARRL request discusses laws, commonly called "scanner laws," that make it a crime to have short-wave radio equipment in any automobile which can receive police transmissions.

The state of New Jersey has a broader law which requires a permit issued by the police to install equipment which is "...operative on frequencies assigned by the FCC for fire, police, municipal or other government uses."

The ARRL makes two arguments in support of pre-emption. First it contends that most commercial receivers can be tuned slightly beyond the edges of the ham bands, and second; "...amateur

According to the League, many transceivers "...have non-amateur reception capability well beyond the 'incidental' -- they can receive across a broad spectrum of frequencies, including the police and other public safety and special emergency frequencies... This additional capability," ARRL argues, "permits amateur operators to take part in a variety of safety activities."

Interestingly, the FCC reports that the **Associated Public-Safety Communications Officers, Inc.** (APCO is this nation's oldest and largest public safety communications organization) suggests that there are "...methods of protecting communications available to public safety, such as encryption, which is easy to procure and much less invasive of the citizen's right (or privilege) to listen to what is being transmitted over the radio. APCO believes that, in this modern age, it is the responsibility of an agency to protect its own confidential communications through the use of technology..."

The FCC now says it needs **(by June 7th)** more technical information on the following:

- (1.) ...the availability of complying VHF/UHF mobile/portable amateur radio equipment;
- (2.) ...percentage of existing VHF/UHF mobile amateur equipment that receives only the ham bands, within 25 kHz of the band edges, or well up into the public safety channels.
- (3.) ...percentage of amateurs who purchase and use commercially made mobile equipment.
- (4.) ...what is necessary technically for manufacturers to produce equipment that complies with the laws ...and the associated costs.
- (5.) ...what is required technically (and the costs) to modify existing amateur equipment.
- (6.) ...what instances have occurred where the laws in question have adversely affected amateur radio operation.
- (7.) ...is there a public interest in having ham equipment available that can receive non-amateur spectrum.
- (8.) ...what would be the effect on the amateur equipment marketplace if U.S. requirements were more restrictive than those of the rest of the world?
- (9.) ...what is the effect of "scanner laws" on the interstate sale of amateur equipment and its interstate transport by amateur licensees.

WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER?



• The FCC has changed to a contractor supported forms distribution system. Volunteer Examiners who need to obtain quantities of FCC Form 610 either may complete a **Request for Forms** card (FCC Form 207) indicating the form number and quantity you need - or you may dial 202/632-FORM and leave your request on the answering machine provided for that purpose.

The forms contractor is required to fill orders and deliver them to the post office within three workdays after receipt of the order. All orders, with the exception of large bulk orders, will be mailed first class to the requester. Contact Scottie Dobson at 202/634-1778 if you have any questions on this new forms ordering procedure.

• Any licensed amateur radio operator may now **obtain a new call sign at any time** by simply completing a Form 610 Application - even if the licensee's operator class and mailing address has not changed. As in the past, however, no requests for specific call signs are granted. An amateur call sign is only changed when the licensee requests another call by checking FCC Form 610 line No. 2E. Once the change is made, however, your previous call cannot be reinstated. The FCC Form 610 instructions concerning eligibility for a new call sign will be changed on the next printing according to Larry Weikert at the FCC's Gettysburg, PA licensing facility.

Are you aware that the FCC Form 610 instructions state: "Every amateur operator should have a current copy of the *Amateur Service Rules*." We have them available for \$2.95 each - or 25 for \$12.50. (W5YI, PO Box 565101, Dallas, TX 75356) The low 50¢ cost is so VE's may give them to new licensees.

## CALL SIGN ASSIGNMENT SEQUENCE

**Group A: Amateur Extra Class operators**

Region Prefix/Suffix

0-9 K, N or W by 2 letter suffix  
AA-AK, KA-KZ, NA-NZ, WA-WZ by 1 letter  
AA-AK by 2 letters (then Group B)

**Group B: Advanced Class**

0-9 KA-KZ, NA-NZ, WA-WZ by 2 letter suffix

**Group C: General/Technician Class operators**

0-9 N by 3 letter suffix. (New W & K prefixed 1X3 call signs are not issued at this time.)

**Group D: Novice Class operators**

KA-KZ or WA-WZ by 3 letter prefix

## AMATEUR RADIO CALL SIGNS

...issued as of the first of March 1991:

Radio District	Gp.*A* Extra	Gp.*B* Advan.	Gp.*C* Tech/Gen	Gp.*D* Novice
0 (*)	AA0DU	KF0PY	N0NBL	KB0IMG
1	WQ1G	KC1ZT	N1INM	KA1YIH
2 (*)	AA2DQ	KE2ZX	N2LUS	KB2MJZ
3	WK3I	KD3WA	N3IXS	KA3YNP
4 (*)	AC4DL	KN4XB	(**)	KC4WKA
5 (*)	AA5XE	KI5NX	N5SFY	KB5OZX
6 (*)	AB6BI	KK6XE	(**)	KC6SFQ
7 (*)	AA7HS	KG7NL	N7QKP	KB7MVZ
8 (*)	AA8DF	KF8LW	N8NNB	KB8LXY
9	WZ9I	KF9BW	N9KQN	KB9GIH
N.Mariana Is.	AH0K	AH0AH	KH0AN	WH0AAP
Guam	KH2R	AH2CI	KH2FA	WH2AMU
Johnston Is.	AH3D	AH3AD	KH3AE	WH3AAG
Midway Is.		AH4AA	KH4AG	WH4AAH
Hawaii	(**)	AH6LA	NH6YI	WH6CLE
Kure Is.			KH7AA	
Amer. Samoa	AH8D	AH8AE	KH8AI	WH8ABA
Wake W.Peale	AH9A	AH9AD	KH9AE	WH9AAH
Alaska	(**)	AL7MV	NL7WI	WL7CBG
Virgin Is.	NP2K	KP2BV	NP2ED	WP2AHG
Puerto Rico	(**)	KP4RR	(**)	WP4JWL

**CALL SIGN WATCH:** \* = All 2-by-1 "W" prefixed call signs have been assigned in the 2nd, 4th, 5th, 6th, 7th, 8th and "0" radio districts where 2-by-2 format call signs from the AA-AK block are now being assigned to Extra Class amateurs. (Other than DX, only the 1st, 3rd and 9th district have 2-by-1's left!)

\*\* = All Group A (2-by-1) format call signs have been assigned in Hawaii, Alaska and Puerto Rico. Group "B" (2-by-2) format call signs are assigned to Extra Class when Group "A" are depleted.

\*\*\* = Group "C" (1-by-3) call signs have now run out in the 4th, 6th and now Puerto Rico call districts. According to the rules (adopted by the Commission Feb. 8, 1978, Docket No. 21135), Technician/General class amateurs are next assigned Group "D" (2-by-3 format) call signs when all Group "C" have been assigned. Upgrading Novices holding a 2-by-3 format call sign in the 4th, 6th and Puerto Rico call areas will no longer be able to request a Group "C" call and will be automatically assigned another more recent 2-by-3 format call sign if they do! The FCC has said they will not be going back and reassigning unused "K" and "W" 1-by-3 format call signs.

[Source: FCC, Gettysburg, Pennsylvania]



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## CENSUS OF AMATEUR RADIO OPERATORS

State:	Jan. 1988:	Jan. 1989:	Jan. 1990:	Jan. 1991:
Alabama	6046	6207	6564	7098
Alaska	1959	2004	2084	2238
Arizona	8047	8363	8838	9477
Arkansas	3307	3429	3643	3935
California	60392	62547	66763	73646
Colorado	6998	7256	7540	8136
Connecticut	6527	6628	6984	7490
Delaware	1020	1039	1099	1172
Dist. of Columbia	405	419	437	445
Florida	26479	27554	29097	31363
Georgia	8207	8631	9170	9907
Hawaii	2193	2295	2416	2539
Idaho	1999	2073	2208	2383
Illinois	17569	17692	18282	19322
Indiana	9992	10241	10724	11389
Iowa	5058	5123	5293	5562
Kansas	4730	4816	5017	5323
Kentucky	4760	4961	5201	5669
Louisiana	4876	4942	5177	5520
Maine	2561	2660	2807	3049
Maryland	7917	8126	8508	8992
Massachusetts	11170	11425	11939	12752
Michigan	14279	14519	15073	15896
Minnesota	7148	7321	7553	8093
Mississippi	2669	2807	2955	3214
Missouri	8212	8355	8698	9217
Montana	1595	1645	1762	1877
Nebraska	2904	2959	3035	3214
Nevada	2081	2210	2308	2508
New Hampshire	2944	3076	3227	3501
New Jersey	12933	13035	13486	14244
New Mexico	2882	2957	3066	3259
New York	25976	25874	26869	28628
North Carolina	9082	9510	10167	11078
North Dakota	1117	1126	1155	1213
Ohio	20912	21309	22208	23754
Oklahoma	5351	5524	5829	6245
Oregon	7815	8015	8418	9051
Pennsylvania	17537	17763	18491	19648
Rhode Island	1701	1760	1842	1986
South Carolina	3786	3960	4191	4503
South Dakota	1116	1121	1147	1217
Tennessee	7957	8257	8722	9441
Texas	25738	26449	27819	29703
Utah	2891	3080	3297	3779
Vermont	1152	1196	1260	1385

(Continued on Page 7...)

## JANUARY AMATEUR LICENSING STATISTICS

<u>January</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	
New					
Amateurs:	1189	2234	2465	1816	
<u>Upgrading:</u>					
Novices	864	1373	1190	512	
Technicians	276	428	477	243	
Generals	255	320	338	147	
Advanced	<u>175</u>	<u>209</u>	<u>220</u>	<u>92</u>	
<b>Total:</b>	<b>1590</b>	<b>2330</b>	<b>2225</b>	<b>994</b>	
<u>Renewals: (*)</u>					
Total Renew:	1972	868	* 193	* 63	
Novices	173	143	* 32	* 6	
<u>Purged:</u>					
Total Dropped:	759	1473	978	2199	
Novices	355	550	375	1010	
<u>Census:</u>					
<b>Indiv. Oper.</b>	<b>432411</b>	<b>444167</b>	<b>466554</b>	<b>502133</b>	
Change/Year +	15796	+11756	+23387*	+35579*	
<u>Individual Operators by Class: (and % of total)</u>					
<u>Extra</u>	<u>Advan.</u>	<u>General</u>	<u>Technic.</u>	<u>Novice</u>	<u>Total:</u>
<u>January 1988</u>					
43970	98408	113958	93675	82400	<b>432411</b>
10.2%	22.7%	26.3%	21.7%	19.1%	100.0%
<u>January 1989</u>					
47221	99164	113823	102931	81028	<b>444167</b>
10.6%	22.3%	25.6%	23.2%	18.3%	100.0%
<u>January 1990 (*)</u>					
49950	101370	116329	114505	84400	<b>466554</b>
10.7%	21.7%	24.9%	24.6%	18.1%	100.0%
<u>January 1991 (*)</u>					
53941	105411	119905	127785	95091	<b>502133</b>
10.7%	21.0%	23.9%	25.5%	18.9%	100.0%
Club/					
RACES &	(1988)	(1989)	(1990)	(1991)	
Military:	<u>2395</u>	<u>2263</u>	<u>2450</u>	<u>2434</u>	
<b>Total Active:</b>	<b>434806</b>	<b>446430</b>	<b>469004</b>	<b>504567</b>	
% Increase	+2.6%	+2.7%	+5.1%*	+6.6%*	
+6.22%*					

(\*) NOTE: The number of amateurs in 1990 and 1991 is not comparable with prior years. Due to the implementation of the 10-year term license in 1984, amateurs who would ordinarily be dropping out of the Amateur Service between 1989 and 1993 by not renewing will be carried on the amateur roles for another five years before being purged from the FCC's data base. This has the effect of overstating the amateur census for 1989 and 1990 since the records of silent keys and non-renewals will not be deleted. The number of active amateur radio operator records now is in excess of half a million!

[Source: FCC Licensing Facility, Gettysburg, PA]



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## (AMATEUR CENSUS, Continued from Page 6)

State:	Jan. 1988:	Jan. 1989:	Jan. 1990:	Jan. 1991:
Virginia	10065	10452	10984	11872
Washington	13658	14327	15085	16371
West Virginia	3103	3199	3435	3755
Wisconsin	6808	6865	7207	7685
Wyoming	971	989	1018	1087
Guam	289	295	320	336
Puerto Rico	5284	5519	5846	6634
Virgin Islands	196	211	228	247
Other	47	51	62	75
TOTAL:	432411	444167	466554	502133

(Note: "Other" includes such U.S. possessions as American Samoa, Johnston Island, N. Mariana Island ...and others.

[Source: FCC Licensing Facility, Gettysburg, PA]

● We received a nice note from **Lloyd/W6KG and Iris/W6QL** who are headed back to the U.S. It reads: "Dear Friends: We finished a six-month DXpedition in Africa today. ALL of our operations on this trip were rare countries: To summarize, in the order of operation: **5H0QL (Dar-ers-Salaam, Tanzania)** about 3 active amateurs in country; **7Q7KG (Malawi)** NO stations in country until just before our arrival; **C9QL (Mozambique)** NO fully licensed amateurs for 15 years before our arrival; **ZS9/W6KG (Walvis Bay)** only two active amateur stations upon our arrival and **9U5QL (Burundi)** NO active stations for several years before our arrival.

We made several side trips to countries where either time, fighting, or non-availability of licenses prevented operation. These were The Congo, Zaire, Rwanda, and Uganda.

All this made us very much wanted by hams world-wide. The pile-ups were enormous, but we enjoy them and have learned, on both fone and CW, to copy stations with many others calling on top of them.

We made a total of nearly 40,000 QSOs, and our half-year operation was a great success. Our total countries visited now totals 218. We qualified for DXCC in more than half of these countries.

73 es 88, **Lloyd/Iris Colvin W5KG/W6QL**"

● The **Canadian Banned Country List** is a list of foreign nations that forbid radio communications with Amateur stations under their jurisdiction. They are the following: Angola, Burma, Ethiopia,

Ghana, Iraq, Saudi Arabia, Suriname, Thailand and Zaire. There are no banned countries for U.S. licensed amateurs.

● Did you see the article in the March 18th issue (page 132) of Forbes Magazine entitled **Communicating with the World**. A sub-headline says "Never before has it been easier or cheaper to become a ham radio operator." Forbes has a circulation of nearly a million and it should help get the word out that "You don't even need to know Morse code any more. ...Until mid-February of 1991 all levels required knowledge of Morse code. But now you can get a second-stage 'technician' license without putting in the time to become proficient in Morse."

CNN news anchor, **David T. French, N4KET**, of McLean, Virginia is shown tuning a ham rig at his office. "When the San Francisco earthquake occurred, he furnished CNN with sound bites recorded from hams he contacted." We tried to telephone Dave, but he has an unlisted number.

● **We did note one discrepancy in the Forbes article.** They said "There are about 1 million licensed ham (as in "theatrical ham") radio operators around the world, including 494,000 in the U.S. and another 35,000 in Japan."

That sure does not agree with the February English edition of **The JARL News** put out by the **Japan Amateur Radio League, Inc.** JARL says they have compiled and completed their new call book which **lists all 1,050,000 of Japan's stations** licensed as of September 1, 1990. The two volume set (in Japanese only, English version is not available) has nearly 2,800 pages - the size of the U.S./North American and International Callbooks put together. Most of Japan's amateurs hold the no-code 10-watt 4th Class "telephone" license which surprisingly allows some HF phone privileges below 30 MHz.

JARL also put in a plug for their **Ham Fair '91** - the world's largest amateur radio convention - about the size of two **Dayton HamVention's** put together. It runs from August 23-25 at the **Tokyo International Trade Center**. The first floor is set aside for the **JAIA Equipment Fair (Japan Amateur Industries Association)** and special commemorative radio station **8J1HAM**. The second floor features ham radio clubs "...selling heaps of junk."



- We received an interesting press release from **Pat Flynn, N7PQL** announcing his free QSL mailing service for USA amateur radio operators called the **QSL POST OFFICE**. They will mail any USA or Canadian destination QSL cards first class (or Canadian QSL cards to any U.S. destination) postage free to the sending ham. To register with the **QSL POST OFFICE**, interested hams should send a 29¢ #10 SASE to PO Box 28055, Lakewood, CO 80228, (Tel. 303/763-9046) and complete details will be mailed immediately. The service is apparently paid for by advertisers to the **Ham Radio Bulletin** which is enclosed along with the outgoing QSLs.

- We also got a rather unusual note from a law student (**George F. Arsics, Jr., 2571 Bethany Lane, Powder Springs, GA 30073**) saying that he is conducting research to use in a student thesis on **"...the FCC violating constitutional rights."** He wants anyone who has information on the subject to send a brief summary to him.

- **HIGH-TECH NOMAD** is the title of an article appearing in the March/April issue of **THE FUTURIST**, journal of the **American Future Society**, featuring **Steve Roberts, N4RVE**. The **American Future Society** is an organization which delights in looking toward what life will be like many years from now. (Hopefully it won't be the life that Roberts leads!)

The story tells how hacker/tinkerer Steve Roberts gave up his high-tech position and bought a recumbent (reclining) bicycle several years ago and took to the highways. But unlike other nomads, he never severed his ties with high technology.

Instead he designed "a mind-boggling computerized and pedal-powered bicycle." The latest

version of his 350-pound bike (called The Winnebiko) sports a cellular phone, a FAX machine, several ham radios, a solar power panel, and seven on-board computers - if you can believe that!

I saw a previous version of Steve's bicycle a couple of years ago when he had a booth at the **Dayton HamVention**. It is absolutely unbelievable. At first I thought he was a nut, but after chatting to him, I realized he was an absolute genius - although perhaps mis-guided!

His new bike is 8-foot long and has 54 speeds! Behind the bike is a 4-foot yellow trailer with a solar lid, a flip-down communications bay access door and numerous antennas. The computers are now Macintosh and Toshiba.

His ham radios are an ICOM 2-meter radio that was repackaged and built into the console - an ICOM 725 is mounted in the trailer. He also sports Yaesu 290 and 790 multimode VHF/UHF rigs in the trailer as well. He can even work the satellites from his bike! A small color TV transceiver from AEA allows him to work the growing community of amateur TV stations.

The bicycle (he calls it the "Behemoth" - for Big Electronic Human-Energized Machine) carries extensive camping and life-support gear, including medical supplies, emergency food stocks, a filtration system for wild water, emergency flares, basic weaponry, camp cooking equipment, harsh weather clothing, ...a custom tent

Roberts continues to do computer research, write books, and even puts out a professional magazine on his exploits, all while peddling down the highways on his bicycle! It is done by pressing different combinations of keys on his handlebars to produce the desired letter of the alphabet.

Roberts wrote **"Computing Across America"** while pedalling

16,000 miles across the U.S! It was this book that he was selling at Dayton when I met him. His first on-board computer in 1983 was a **Radio Shack Model 100** powered by a 5-watt solar panel.

He now has nearly 130 corporate sponsors (including Apple Computer, Atari, Hewlett-Packard and General Electric) who have chosen to financially support his adventures down the highway.

He is getting ready to hit the road again ...pedalling across the United States and I am thinking seriously of following his progress in this newsletter. He has the only bicycle that I have heard of that has MCI-Mail, packet radio, a cellular phone, ATV, and global telecommunications capability. I hear from him periodically via electronic mail. He will be heading out again starting in July.

There is no telling what his newest bicycle is worth ...one estimate was \$1 million dollars - all designed and built by **Steve Roberts, N5RVE**. It took him nearly 3 years to build, but it will never be completed. He just keeps adding to it!

"**The Futurist**" article closes with "Ultimately Robert's dream is to make possible a whole community of high-tech nomads who will live and work while travelling constantly. Given his past successes in inspiring people and in demonstrating the possibilities of this unique lifestyle, such a nomadic community might not be so far down the road." (**N4RVE, P.O. Box 2390, Santa Cruz, CA 95063**)

- Many special operating activities are planned for the 200th anniversary of the birth of **Samuel F.B. Morse**, inventor of the Morse telegraph and its associated code. Morse was born on April 27, 1791. The activities are being planned by **Morsum Magnificat**, a Morse enthusiast publication out of England.

AMECO LICENSE PREPARATION MANUALS - Contain all Amateur Radio Examination questions, multiple choice, correct answer, and explanation.  
HAM LICENSE PREPARATION SOFTWARE - Take sample ham radio tests a, Jr IE bmp le ke, hrd!  
B31 Jdy



# W5YI REPORT

National Volunteer Examiner Coordinator

Page #9

March 15, 1991

● Our W5YI-VEC operation is noticing a **very big increase in testing activity** since the *Codeless Technician Class* took effect on February 14th. The number of applicants being examined has nearly doubled during the past three weekends. We are also noting a big **decrease** in testing for Element 1(A), the 5-WPM code examination. The early returns are in and it appears the public likes the idea of becoming a ham operator without the necessity of being Morse code proficient. Hopefully this trend will continue and won't be a "flash in the pan" like *Novice Enhancement* was three years ago! We will keep you posted.

● The April 1991 edition of *ComputerCraft* (formerly Modern Electronics magazine) has an excellent article in it on **IBM computer compatibility**. It is the system ROM (Read-Only Memory) BIOS (Basic Input/Output System) microchip that plays the key role in determining IBM compatibility.

Early clones simply used exact copies of IBM's PC BIOS to insure compatibility. The courts and copyright infringement put an end to this practice. This led to the development of several non-infringing BIOS by such companies as Phoenix Technologies, Award Software and American Megatrends.

It is possible to plug in another replacement BIOS chip depending on the error message you get when running specific IBM compatible software. New BIOS's cost anywhere from \$25 to about \$95 each.

● Packet radio activity has been a part of amateur radio space communication for almost a decade. **Now packet radio is a permanent fixture in the Soviet manned space station, Mir, call sign U2MIR.**

According to Soviet coordinator, **Boris Stepanov, UW3AX**, the

packet equipment was launched to Mir on a Progress M6 re-supply "space truck" on January 14, 1991. **Courtney Duncan, N5BF**, reported the first contact on Sunday, January 20.

The Mir packet equipment consists of a donated ICOM IC-228A 2-meter FM transceiver and Pac-Comm Handi Packet unit together with a laptop computer. **Musa Manarov/UV3AM**, familiarized himself with the equipment late last year just prior to his launch to orbit.

Some configuration changes to the existing unit will be made by U2MIR command shortly. One of the changes U2MIR is planning to make is allowing up to 10 connections simultaneously. Additional changes to increase QSO/QSL-ability will also be phased in sometime in the future.

The down link frequency on which to contact U2MIR is 145.55 MHz. Some consideration is being given to using split frequency operation to improve communications. The information will be announced when it is available.

● There apparently will not be an **American astronaut to Soviet cosmonaut ham radio exchange in space** next month as was originally hoped. In a packet mail exchange between **Musa Manarov/U2MIR** aboard the Mir Soviet space station and NASA/Houston's W5RRR, Musa confirmed that he would be aboard Mir until May 20, 1991.

The next SAREX (*Shuttle Amateur Radio Experiment*) mission (STS-37) originally scheduled for April presented an opportunity for the first ham astronaut to ham cosmonaut amateur radio contact while in orbit above the earth.

Unfortunately, due to recent shuttle hardware problems the shuttle is now grounded for at least four months, which eliminates that possibility. (Thanks, W5RRR)

● You may shortly have the ability to talk back to your TV. The FCC has proposed establishment of **interactive video data service** in the 218-218.5 MHz band. Comments are due June 10, replies July 10.

● There were a **record number of EBS (Emergency Broadcast System) activations** during 1990. The 1,410 activations were from 192 stations and cover such situations as flash floods, tornadoes, severe thunderstorms, floods, blizzards, ice storms, power outages, high winds, chemical explosions, evacuations, small stream flooding, prison escape, telephone outage, Hurricanes Lily and Gustav, gasoline spills, fires, gas leaks and a railroad chemical spill. The stations received notification to activate through NOAA weather radio, EBD decoder/receiver or state and local officials including police, fire and emergency personnel.

● You can look for new **cable-TV rate-regulation proposals** from the FCC on May 9. In general, cities, states and over-the-air broadcasters have called for stronger regulation; cable companies want less regulation.

● Gemstar's **VCR Plus** is a \$50 battery-powered gadget that allows you to **program your VCR by entering program codes** into a remote-control keypad. It measures only 4 by 6 by 1-inch high and can store up to 14 programs. The user simply keys in the TV channel plus a 4 to 7 digit number (published in newspaper TV program listings) which represents the date of the show, the time it starts, the channel and the length. The input number appears on a LCD screen just above the keypad. A pulse is then sent by the **VCR Plus** unit to the sensing mechanism in the recorder.



## FCC DECLARES END TO HF NET PROBLEM

According to IARN's *Glen Baxter, K1MAN*, of Belgrade Lakes, Maine, the FCC has officially declared an end to the so-called "Twenty Meter Net Mess." Baxter believes the end was influenced by his serving United States Federal District Court Subpoenas on FCC Field Operations Bureau Chief Richard M. Smith, Belfast (Maine) Engineer-in-Charge Barry Bohac, and Belfast Engineer Arthur Hallam on March 1, 1991.

Robert McNamara, FCC Special Services Chief, said in a letter dated March 4, 1991 to Baxter:

"Dear Mr. Baxter:

On December 21, 1989, I invited you and other amateur service licensees to develop a joint plan addressing the underlying causes of on-the-air disputes that were taking place on the 20 meter amateur service band. At your request, I extended the time for developing the plan from July 1, 1990, until February 1, 1991.

The Commission has received your letter and a letter from G. Robert Greenberg and informing us that such a plan is now unnecessary because the controversy has been alleviated. Mr. Greenberg states that no problem now exists, no solution from the Commission is required or desired, and any Commission action will create problems. He believes the Commission should declare the case closed, a view you share, and that the existing rules are adequate to address any operating violations that may occur.

Based on the views and input from you, Mr. Greenberg, and other influential members in the amateur community, I can only conclude that the dispute is no longer a significant problem and that potentially restrictive rule making can be avoided at this time. The ability of the amateur community to address this dispute internally serves as a model for the resolution of any similar controversies concerning the amateur service in the future.

I thank you for your patience and contributions in addressing this controversy and I wish you the best in pursuing the basis and purposes of the

amateur service.

Sincerely,

Robert H. McNamara

Chief, Special Services Division"

Asked to comment on the recent turn of events Baxter said: "My famous Trojan Horse editorial over IARN on August 25, 1990, was designed to bring this matter to a head, and apparently triggered the flurry of Notices of Apparent Liability. Ultimately \$3400 worth of Notices were filed against K1MAN."

"These Notices wouldn't stand up in Court, of course, and the FCC knows it. Now, the \$5,000,000 lawsuit against the ARRL for their various dirty deeds, and the Subpoenas issued against the FCC, have brought things to another head, and thus the monumental letter from Special Services Chief McNamara."

"While we are not out of the woods yet, the light is visible at the end of the tunnel," Baxter said. "I say the amateur service is alive and well, and that the good guys will come out on top in our great and victorious nation, with equal justice for all who have the guts to stand up and take some heat."

## **FEDERAL JUDGE ORDERS THE ARRL LAWSUIT READY FOR TRIAL**

According to K1MAN, a \$5,000,000 lawsuit brought against ARRL by K1MAN for various League dirty deeds will go to trial shortly after August 15, 1991, by ORDER of a Federal Judge. The jury trial will be held in Bangor, Maine, in Federal District Court, in the new courtroom first presided over by Federal Judge George Mitchell, now the United States Senate Majority Leader. The Federal District Court Scheduling Order dated March 6, 1991, also specifies that a final demand for settlement must be filed by K1MAN with the Court by August 1, 1991, and that the ARRL must respond by August 15, 1991. The presiding Judge will be the Honorable G. Brock Hornby. Glenn Baxter, K1MAN, on advice of counsel, declined to comment about any details of the case. "You can read about it later in the book coming out about IARN in about a year," Baxter said.